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Cinematographer

THIS ISSUE . . .

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NOVEMBER

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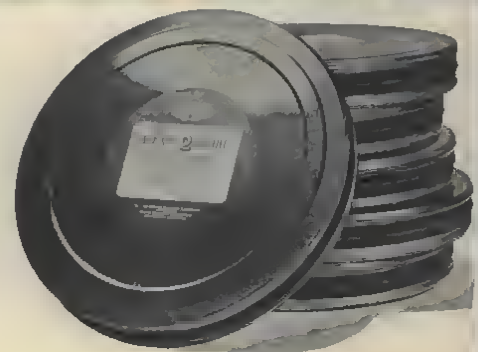

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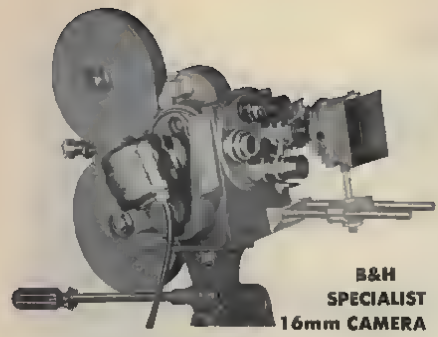

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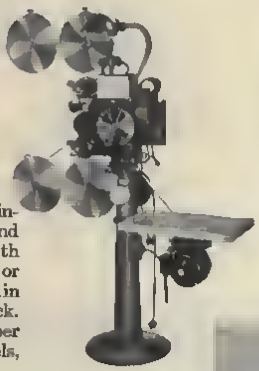

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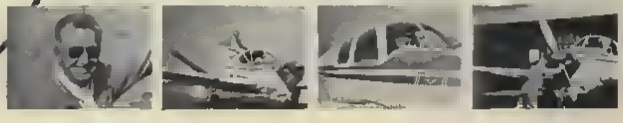

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ON THE COVER

LEE GARMES, A S.C, during a lull in the shooting of Samuel Goldwyn's "With All My Love," shows starlet Ann Blyth and Phillis Kirk, who plays supporting role, light tests of their most dramatic scene Assignment is third in a row for Garmes at Goldwyn Studio —*Photo by Jake Michle*

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★

AMERICAN SOCIETY OF CINEMATOGRAPHERS

FOUNDED January 8, 1919, The American Society of Cinematographers is composed of the leading directors of photography in the Hollywood motion picture studios Its membership also includes non-resident cinematographers and cinematographers in foreign lands Membership is by invitation only

The Society meets regularly once a month at its clubhouse at 1782 North Orange Drive, in the heart of Hollywood. On November 1, 1920, the Society established its monthly publication "American Cinematographer" which it continues to sponsor and which is now circulated in 62 countries throughout the world

Dominant aims of the Society are to bring into close confederation and cooperation all leaders in the cinematographic art and science and to strive for pre-eminence in artistic perfection and scientific knowledge of the art

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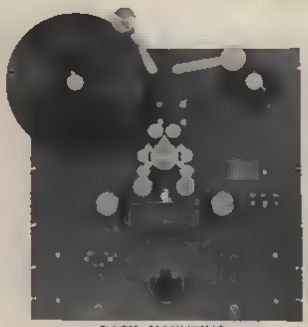

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TOM TUTWILER, A.S.C., has returned to Alaska to resume photography on a series of training films which Apex Film Corp. is producing for the U.S.A.F. Shooting remainder of series in Monopack, Tutwiler will use a special Mitchell camera conditioned for trouble-proof operation in below-zero temperatures.

•

CHARLES G. CLARKE, A.S.C. President, returned to Hollywood from his Berlin Assignment October 27. After reporting in to 20th Century-Fox, he made preparations to fly to New York where he is to be a guest of honor at the formal opening and dedication of the George Eastman House in Rochester. Clarke will participate in a symposium on "The Science And Art of Photography," to be given in Kilburn Hall.

•

OEWEY WRIGLEY, A.S.C., is in Europe gathering stock shots for Paramount Pictures to replace the obsolete pre-war footage in its library. He recently completed shooting in Switzerland and was last reported in Italy.

•

RICAROO MARCELINO, A.S.C. has extended his Hollywood stay in order to supervise the processing, editing and dubbing of sound for the first Ansco Color feature filmed in the Philippines. Picture was photographed by his son, Tomas, who is pinch-hitting as cameraman in dad's absence at the Premiere Studio in Manila.

•

O. H. BORRAOAILE, A.S.C., and Al Gilks, A.S.C., while shooting color tests in Griffith Park, near Hollywood, recently, checked what might have been a disastrous fire there. Observing brush on a nearby hill suddenly bursting into flame, they quickly summoned the fire department who had conflagration under control in record time. Borradaile photographed the British production "Saints And Sinners," which is receiving rave notices from critics during its current New York run.

•

KARL FREUNO'S paper on color temperature, which was read at the recent convention of the S.M.P.E. in Hollywood, was one of highlights of the papers program. Paper proposed a new and simpler system to describe color composition of light sources, obviating need for tables or involved computations.

•

TELEVISION station KECA-TV recently demonstrated the practicability of projecting backgrounds in sync with TV cameras, using 16mm. projectors. Synchronization is effected by speeding up projector to 30 frames per second.

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ONE of the five M. B. Paul photo backgrounds used in Samuel Goldwyn's production "With All My Love." Vic Jones, of the studio's electrical department, who designed special lighting equipment for the backgrounds, is shown here taking a light meter reading, preparatory to varying the light for different areas of the backing. It is shown lit above normal intensity, from which point Jones worked down to the lighting desired.

Lighting Translucent Backings

New multi-unit light source developed by Goldwyn Studio technicians cuts lighting costs and affords more selective illumination control.

By LEE GARMES, A.S.C.

"WITH ALL MY LOVE," which we recently completed shooting at Samuel Goldwyn studio, marks the first wide use of the new one-piece translucent photo backgrounds recently introduced by M. B. Paul.* More important, it marks the development of a greatly improved method for illuminating them.

Through the use of these backings we were able to bring some of the original exterior locale for the picture right into the studio, incorporating it with the sets. The backings which M. B. Paul produced for the picture were comparatively simple, consisting of five exterior views as seen from the front, sides and rear of the Pasadena residence which provided the main locale of the story. Through their use, we were able to cut location time considerably. We spent only two days and part of two nights at Pasadena. The rest we filmed at the studio, the backings filling in whatever we needed scenically in conjunction with the studio sets.

Previously the art department had supplied Paul with a chart of the camera angles to follow and he went out and shot

*M. B. PAUL'S method for making and using his recently developed one-piece translucent photo backgrounds was described in an article in the July, 1949, issue of *American Cinematographer*. Paul, former studio still photographer and member of International Photographers Local 659, is believed to be the first to develop a satisfactory method for applying sensitized emulsion evenly distributed on large scale translucent surfaces. His backings not only improve sets pictorially, but contribute marked economies both in time and lighting costs.

8 by 10 negatives for the backings From these he made 15 by 20 foot photo enlargements on sheets of durable, seamless translucent material, a product of his own secret process, delivering them to the studio in advance of starting date of the picture. Thereafter began a series of tests and experiments which culminated in the development of a lighting method for the backings that is destined to become standard practice throughout the industry.

Previously, where these backings have been used, they have been illuminated from the rear by various methods. At some studios this has been done by reflected light while at others spots or floods were used. At first we tried lighting them with as many as fifteen Duarcs.

One of the things we discovered early was that these backings, in addition to being superior to the old opaque type, also afforded the director of photography opportunity to extend the scope of his compositional lighting to the backings themselves —providing the proper lighting could be developed. What we needed was a source of illumination that could be varied over the entire area of the backing—made "hot" at one point and subdued at another, and be flexible enough so it could produce the right kind of illumination for both daytime and night effects, using the same source.

Here my gaffer Vic Jones put his inventive abilities to work in solving the problem. He saw there were two requisites for a suitable lighting source: it must be economical compared to other lighting methods that have been tried, and it must afford selective illumination control over the entire backing area

What Jones developed was a huge mobile framework incorporating seventy individual light units. It can be moved close to the backing to throw *controlled* illumination from the rear I have emphasized the word *controlled* because the method is the only one that will give selective control of light intensity for any section of the backing area

The two photos on this page show the illuminating frame and its relation to the backing. The wooden framework is 20 by 20 feet in size and is fitted with fourteen parallel ribs or tiers, each carrying five R-2 photofloods in fixed sockets. Each tier is mounted so it may be pivoted to swing the lamps up or down, as desired. In addition, the wiring of each tier is independent of the others, leading to dimmer-bank controls. Thus, by means of dimming and by pivoting the lamps so as to concentrate the directional beams of light as desired, or by "killing" certain lamps in the assembly, lighting of the entire backing may be carefully controlled One corner of the backing or a spot in the center, for example, may be made brighter than the rest, or certain areas or details may be emphasized or subdued by the selective lighting control this method affords.

With this lighting method we were able to enhance the startling realistic detail of the backings, especially when the set was lit for a dusk or night shot. The photo on opposite page shows one of the major backings used in the picture This backing reproduces in infinte detail the across-the-street scene as viewed from the veranda of the home in which much of the story action takes place. In using it for a dusk shot, we subdued illumination at the top and toned down the foreground. For the full night effect, the backing was completely masked at the rear except for openings for windows, and illuminated from the front. Through selective lighting control, we were able to vary the intensity of light in the windows of different parts of the house, thus lending further authenticity to the scene

An important development of this new lighting system is the method Jones devised for charting the lighting used with the backings in each scene, so that in event retakes were necessary, we would be able to match the lighting exactly. The charts showed the complete frame and each lamp thereon The units that were extinguished, dimmed or altered in any way

(Continued on Page 417)

STANDING beside the unique lighting unit, which he designed especially for use with M G Saul photo backings, is Vic Jones of Samuel Goldwyn Studio Framework consists of 14 pivoting tiers of five lights each Each tier is controlled through dimmer bank, permitting selective intensity of lighting for any given area of the backing

AUTHOR Lee Garmes, A S C, who photographed "With All My Love," and Jones discuss light-meter readings made of the backing This step precedes adjustment of the voltage or angle of various lamps in the frame to obtain the desired lighting pattern

WILLIAM MELLOR, A.S.C., chatting here with Marjorie Reynolds, is typical of the younger generation of cinematographers who got their start in studio camera departments, later working up to assistants and ultimately to full fledged directors of photography.

VICTOR MILNER, A.S.C. (right), while working as a "nickelodeon" projectionist in 1910, determined to become a motion picture cameraman. He rose steadily, becoming one of Hollywood's leading directors of photography, filming many of Cecil B. DeMille's hit pictures

CASE HISTORIES

Ever wonder how Hollywood cameramen got their start?

By FREDERICK FOSTER

How did Hollywood's directors of photography get their start? How did they learn the business of motion picture photography? Do similar opportunities exist today? These are questions readers frequently ask the editor of American Cinematographer.

The case histories of most of the leaders in the profession show that few if any of them boast a diploma from a school of photography. Nearly all of Hollywood's motion picture cameramen got into the business without benefit of a graduate course in cinematography. In Hollywood's formative years there was but one school for those ambitious to shoot movies for the studios. That was the school of experience inside studio gates.

Some of our best cinematographers came into the business in the natural course of hunting for a job. Starting in some menial studio chore, they ultimately found interest in camera work. Others, with earlier and more pronounced leanings for creative work, deliberately sought a career in motion picture photography and planned their contacts accordingly. It can be said, however, that all who ultimately found successful careers as directors of photography were probably destined to do so by virtue of their innate artistic and creative abilities. Hardly any two of them have come up the ladder of success the same way. Let us examine the case histories of just a few of them:

ARTHUR MILLER, A.S.C., in the business 40 years, got his start as lab assistant back in 1909. Here, filmstar Ann Sheridan presents him an "Oscar"—his third—for photography of "Anna And King Of Siam

Russell Harlan, A.S.C., started in the film business as a laboratory assistant for Paramount Pictures when that company bore the name of Famous Players Lasky. After a period of apprenticeship, Russ, who is one of the industry's younger directors of photography, became an assistant cameraman. In the intervening years, Russ also worked as an actor, and a stunt man in between camera assignments.

Because of his familiarity with the lore of the old west, Harlan naturally gravitated toward photographing westerns and other outdoor epics—mostly for Paramount and Harry Sherman. Last March Harlan received the Look Magazine Annual Movie Award for his photography of "Red River." Today, Harlan is considered one of the foremost cinematographers of western stories. As a former cowboy in Arizona and Texas,

(Continued on Page 412)

THIS IS THE DIRECTOR OF PHOTOGRAPHY

"The Cinematographer," informative short subject sponsored by the Academy, shows important role of the cameraman in the production of entertainment movies.

By WARREN GARIN

MOVIEGOERS who'd like to see how movies are made on Hollywood sound stages are getting their wish in the series of industry short subjects currently being shown in theatres throughout the nation. Those who are especially interested in how a major feature is photographed will look forward to seeing "The Cinematographer" when it comes to their local theatre. This is probably one of the most interesting films in the series and depicts the director of photography's role in the production of a motion picture.

It is certain to make the work of the cinematographer more widely understood. Where heretofore the moviegoer rarely has given thought to *how* a picture story is put on film and thence brought to him on the theatre screen, "The Cinematographer" will create greater appreciation for the contribution the director of photography makes in the production in John Public's cinema fare.

Because "The Cinematographer" is a picture most of our readers will want to see more than once, we have no compunctions about describing its content here or for giving excerpts of the descriptive narration. The opening of the picture could not have been more wisely planned. It opens on a view of the Mitchell studio camera, then dissolves to a closeup of the inner workings of the camera, giving the viewer probably his first close-up look at the instrument which is used in photographing theatrical movies.

The director of photography — the man who guides this instrument — is then introduced by the narrator, who adds, ". . . his importance and influence are felt from the moment a motion picture begins to take shape until it is completed. It is on the basis of what his camera can and cannot do that screenplays are written."

Karl Struss, A.S.C., one of the industry's top cinematographers, was chosen by his associates in the American Society of Cinematographers to portray the role of the director of photography in this important documentary that is to reveal

(Continued on Page 421)

THESE frame enlargement from the industry short subject, "The Cinematographer," show some of the interesting procedures followed by the cameraman in photographing a feature film Karl Struss, A.S.C., shown in these scenes, turned actor for this informative film, playing role of the cinematographer—a role he has played in real life for over 30 years.

SIGNALLING "camera left" is Assistant cameramen Harry Webb, co-author of new communication system

BILL McGARRY, Goldwyn assistant director, indicates to camera crew to "roll camera," using new signal system

DIRECTOR David Miller signals to cast to begin action as the camera rolls to taking speed for scene at Goldwyn Studio

Signal System

New method of visual communication boon to production crews shooting on location.

By LEIGH ALLEN

ARM SIGNALS will replace shouts and often-confusing "high signs" commonly employed in relaying instructions between camera crew and those at point of the action on long shot location takes, if the plan worked out recently for a uniform code of arm signals is adopted by Hollywood studios.

The system is already standard practice at the Goldwyn studio. It was conceived by assistant cameraman Harry Webb and assistant director Bill McGarry during the location filming of Samuel Goldwyn's "With All My Love" on a wind-swept stretch of Malibu Beach. Here surf and wind combined to drown out instructions to sound and camera crews even when McGarry used a megaphone.

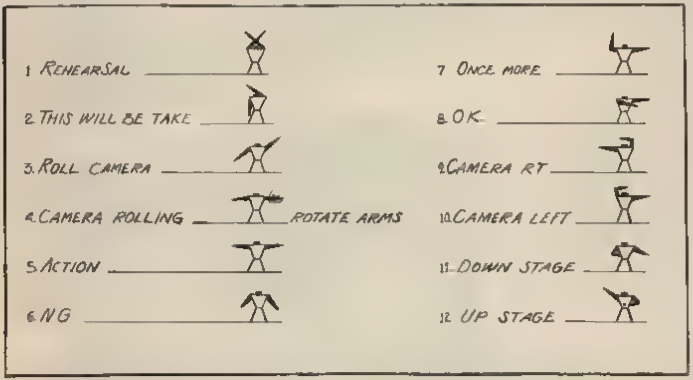

CHART shows code of twelve signals put into use at Goldwyn studio for communicating instructions to crew and cast. Although system was established for use on location filming, it has been found equally valuable when shooting on large sets indoors. It probably will be adopted as standard practice by the major studios.

The signals, as finally worked out, are similar to the semaphore system but are used without flags. They are twelve in number and have been planned to prevent any possible confusion. Regardless from what angle the signals are seen or sent, the meaning cannot be misinterpreted by anyone fully familiar with them.

The twelve signals are illustrated in the chart on this page. The person using them places his arms in the positions shown to relay an instruction or indicate a condition prevailing, such as "camera rolling," "N.G.", etc.

The director calls for a rehearsal of action to be played for a long shot by crossing his arms directly overhead. Or he indicates that it will be a "take" by placing his arms in the position shown at 2. "Action" is indicated by assuming position for signal No. 5.

Where the director is close to the scene of action and his problem is to relay instructions to the camera crew some distance away, he uses signal No. 3 to start the camera, No. 7 to indicate a retake, or No. 8 to inform cameraman the take is O.K.

The cameraman indicates camera is rolling by rotating his outstretched arms, as shown in signal No. 4, or, by using

(Continued on Page 417)

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TIPS ON TITLES Creating original movie titles becomes great fun when kids are involved. Try cutting out the letters of the title and stringing them together. Then have the child walk into the scene and hold the title up in front of the camera

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Ansco

8 and 16 mm
TRIPLE S PAN FILM

CINEMATOGRAPHER Tom Tutwiler, A.S.C., explains to cinefilmer Willard Salisbury how certain scenes demand that the camera be raised or lowered in order to present mute forcefully the idea to be conveyed

SKILLFUL angling of his camera, Tutwiler points out further, will enable Salisbury to control background and foreground in some scenes, and eliminate undesirable features that might prove distracting

Suit The Angle To The Scene

By THOMAS TUTWILER, A.S.C.

THE VIEW-FINDER of a motion picture camera is nothing more than a frame through which the spectator is allowed to view a constantly changing pattern of visual composition. The cameraman uses his view-finder selectively—choosing one by one various segments of an overall situation and presenting them in sequence so that they convey a particular idea to the audience. The audience is allowed to see only that which the movie maker chooses to funnel through his lens and the black frame surrounding the tiny bits of film which will be projected to fill a screen.

The placement of the camera in relation to the physical elements of the scene and the action taking place within it, creates a biased impression of that scene and action. In other words, the cameraman places his camera to assume a preconceived point of view in each separate scene. The vantage point or camera angle assumed can greatly influence audience reaction to a particular scene. The adept movie maker realizes this fact, and makes full use of it. The basic tenet of his approach to filming is: Suit the angle to the scene.

At first glance, this phrase seems clear enough, and one might assume that it would be a simple matter to select a proper angle for recording a specific scene. Actually, however, this fundamental rule is one which even some professional cinematographers have found difficult to master. It is the kind of thing that requires a kind of cinematic "sixth sense." Lacking this natural feel for the right camera angle, the novice cameraman will do well to study the photography of Hollywood's better films, because these pictures are photographed by men who have spent a lifetime learning to suit the angle to the scene.

Camera angles in a well-conceived film are pre-planned one by one to fit the overall story pattern of the picture, as well as the separate demands of each individual scene. Actually, each film has its own general point of view. For example, the intimate, romantic screen story is filmed as if the camera were a very close bystander to the action. In contrast, the epic or super-saga type of movie requires that the camera assume an almost omniscient point of view, backing far off to show great sweeps of scenery and action. The cameraman is required to form his general concept of the point of view from which the action is to be observed by the audience. He

(Continued on Page 410)

MOVIE CLUB

"DEED TO HAPPINESS," quarter-hour 16mm. color and sound film produced by Cincinnati Movie Club, is example of the type of contribution amateur movie groups can make in the public interest. Here the author and a camera assistant prepare to shoot interior scene for picture in nursing school clubroom. Of the 83 scenes, 73 per cent were interiors.

AFTER THE FIRST few meetings of our newly-formed Cincinnati Movie Club it became apparent that the organization would be short-lived if progressive activities were not included in our plans. Our initial programs comprised screenings of members' personal travelogues, flower garden pictures, movies of "Our Kids," and commercially produced promotion films. Although we soon became tired of this fare we did learn by doing, so to speak, and many "rank amateurs" were able to improve their technique in direct proportion to their enthusiasm and efforts. Some of our meetings were enlivened by guest speakers whose films testified to their proficiency in movie making. We rapidly realized, however, that in order to hold the long term interest of club members we needed some kind of group activity.

Several Cincinnati organizations offered us the dubious honor of devoting our talents to the laborious production of a motion picture for *their* "glory." Naturally these offers were tactfully "tabled." We were definitely interested in a club production but only under the following conditions: (1) it would include a relatively large group of people in the production unit, (2) permit complete supervision by our "planning committee" over all details including script, techniques involved, shooting locations, etc., (3) production to offer a chance for our club members to observe and learn more about difficult filming problems, and (4) the film must be a definite humanitarian service to our community.

An idea was eventually presented by one of our members which offered a challenge to our collective abilities and yet subscribed to all of the aforementioned conditions. The Southwestern Division of the Ohio Hospital Association had found itself in possession of approximately $350.00—surplus from the previous year's activities, and the money was not earmarked for any especially urgent need. The proposition was advanced that the Cincinnati Movie Club produce a nurse recruiting color and sound film, using this money for essentials such as Kodachrome raw film stock, lamp bulbs, sound recording tape and laboratory services. Aim of the picture was to promote interest in a nursing career among high school girls and thus tend to alleviate the shortage of nurses in hospitals of Southwestern Ohio. After several club discussions on the tentative project we collectively decided to "go all out" for this humanitarian service.

Our club roster was inventoried for special abilities and for those who possessed tangible experience adaptable to the production of a color-sound film. Each member who could contribute in any way toward the final result was asked to participate. Thirteen members agreed to devote their unlimited time and services to the production. Our film unit was thereby formed and duties assigned to each person therein.

A tentative script was prepared, and after the necessary research by our writer member, our production planning began. The planning meetings were held, in each case, at one of the member's home at a time suitable for maximum unit attendance. At one of these meetings we screen tested our tentative star who proved to be more talented and photogenic than we had dared hope. Our star had just recently graduated from a local school of nursing and quite naturally therefore entered wholeheartedly into the spirit of the idea.

The plot of the film begins by emphasizing a little girl's early interest in mothering her doll and her gracious interest

LOUIS BARNETT used two Magnecorder tape recorders to record and edit the sound track for "Deed To Happiness." Finished tape sound track was then sent to laboratory for dubbing on the picture film.

FILMING PROJECT

By LOUIS W. BARNETT
Cincinnati Movie Club

Cincinnati movie amateurs pool talents and equipment to produce nurse-recruiting film for hospital.

in helping others in distress as she grows up. As the story progresses, the film shows the girl as a high school senior, and through flashback technique her student nursing days evolve as milestones in her projected visionary future. The girl envisions herself signing up for her "career," receiving her letter of acceptance, packing at home in preparation for her departure, arriving at the nursing school and being greeted by her "big sister" at the hospital of her choice.

It runs the gamut of classroom sessions . . . not mere book learning and recitation . . . but actually learning by doing. We take the nursing student through microbiology, chemistry, nursery, X-ray, and operating room technique. For the scenes of the operation we actually photographed a childbirth by Caesarian section delivery. One of our club members is a prominent obstetrician and gynecologist.

The operation scenes, being highly dramatic in themselves, could not suggest pain, fright or blood. Therefore when they were filmed we were quite careful they didn't contain anything which might be objectionable or disgusting, or tend to frighten away our potential nursing aspirants. The scenes especially show the nurse's importance in her role as the surgeon's second set of hands, depicting how a human life may hang in the balance while the nurse hands the proper instrument to the surgeon at the precise moment he needs or calls for it.

The glamorous element in the life of a student nurse isn't neglected. She entertains her boy friend, she plays basketball, tennis, ping pong, attends tea parties and sings in the glee club. Her living quarters are pictured, the surroundings shown and the great variety of delicious and nourishing food displayed as she fills her tray in the nursing school cafeteria at meal time.

The flashback treatment goes on to show her graduation, the candlelight ceremony and the presentation of her diploma. She then can devote her talents to one of the many channels, and included are the railway stewardess, airline stewardess, hospital nurse supervisor and as the grand climax of all, her role in society as wife and mother.

The flashback then returns the star to her "real" surroundings just as she has actually decided to make nursing her career and with her face full screen size she says, "I want to be a nurse!"

In planning the picture, various individuals, nursing schools, hospitals and business firms were contacted for filming locations, acting personnel, and power availability at each location was checked. Everyone contacted immediately offered 100% cooperation and as a result our invasion of hospital properties and other locations was a pleasant excursion in each instance.

Equipment was furnished entirely by the club members. We used an Eastman Cine Special camera and a Professional Jr. tripod plus an assortment of lenses from wide angle to

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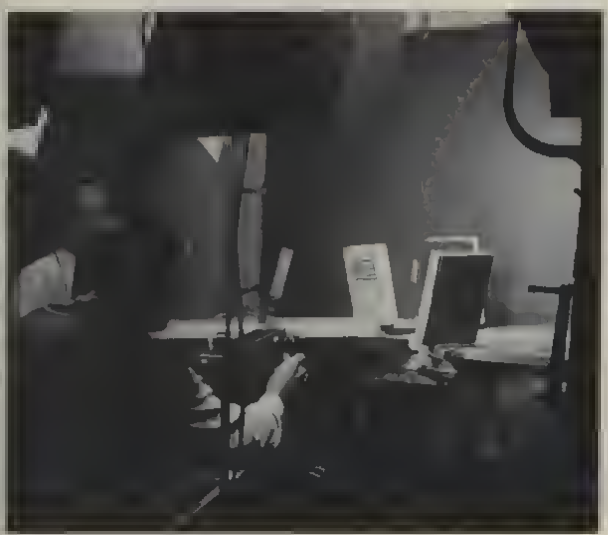


TYPICAL example of amateur ingenuity displayed by members of production unit is this setup for shooting a montage of textbooks mounted on a double turntable. On screen, books appear to zoom toward camera, one after the other.

NURSE'S role in occupational therapy is emphasized in this sequence being photographed by Cincinnati Movie Club camera crew. Club exposed 2500 feet of 16mm. Kodachrome in 25 picture taking sessions

WARWICK TOMPKINS, of Los Angeles, is a typical progressive 16mm cine cameraist who has never let the fact there are several hundred others struggling for success in the same field, deter him from his goal to make financially successful as well as scholastically acceptable 16mm. educational films.

Unlike so many of his struggling contemporaries, Tompkins first explored the *immediate* needs of educators in the Los Angeles school system for instructional films, then went out and filmed them as *they* wanted them filmed.

Despite the typical amateur cine equipment which he uses in shooting his pictures, his projects are far from amateur in scope and results Among his most recent films are one showing the operation of a typical city fire department and two on the life habits of the Harvester Ant.

In the January, 1949, issue of American Cinematographer, Tompkins described how, by fitting his 16mm. Bolex camera with extension tubes and devising a miniature stage to keep his tiny subjects within camera range, he completed the first of his color films on ants

In this issue he tells how, after purchasing two Queen harvester ants, one his "star" and the other her "standin," he went on to complete the sequel to the first film, recording the complete life cycle of the Harvester Ant. Rare microscopic shots achieved through use of simple homemade gadgets enabled him to obtain some startling closeups of the queen laying her eggs, the eggs hatching and the young growing to maturity. His achievement should be an inspiration to other 16mm cameraists, both amateur and professional.—EDITOR.

WARWICK TOMPKINS solved problem of keeping the subject of his microscopic movie—a Queen ant—within range of his lens by confining it in a glass cubicle scarcely an inch square. An extension tube on his Bolex enabled him to photograph her action with high magnification

Fifteen Dollar Movie Star

Weighing 1/9000th of an ounce, she's featured in a 16mm. microscopic movie that involved some new and highly interesting cinematographic methods.

By WARWICK TOMPKINS

CAMERAMEN are akin to fishermen in that their finest shots often "get away." The most interesting thing I observed while making films on Harvester Ants remains unphotographed; nor do I know of any means by which such a scene could be made with equipment now available. The core of the problem arises from the virtual immobility of the camera in micro-photography, the action must be made to occur in a predetermined and very small area where focal depth is frequently measured literally in hundredths of an inch.

Using a ¼-inch extension tube with my f/1.4 Zeiss Biotar depth of focus was approximately a half-inch!

The motions of insects are fast, erratic and unpredictable, eliminating the possibility of following them by panning. So I never got the picture of my Queen ant in the actual act of laying her nearly invisible, extremely-fragile eggs.

Since a harvester ant weighs about 1/9000th of an ounce and I paid $15.00 each for my prized and essential Queens, I believe my film project established a budget figure unique even for Hollywood. My leading lady and her stand-in cost me at the rate of $2,000,000 per pound! Anyone can understand that I treasured them highly.

One of these Queens—and in this I was extremely fortunate—was producing her first generation. Since there is no one but the Queen to care for the first eggs and larvae which she produces, her first offspring are stunted by lack of food. They attain a growth of about one-third the size of their mother.

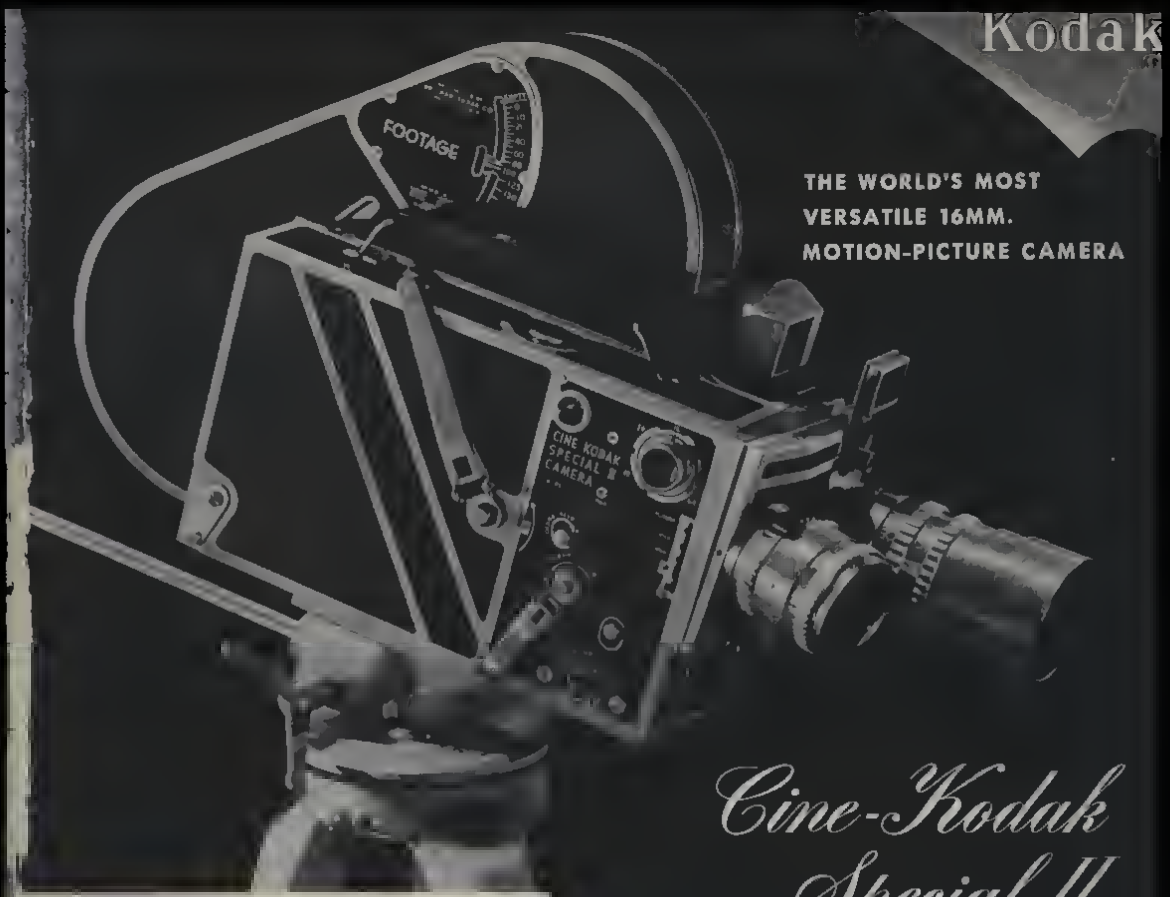
The night I got the Queen and her thirty or forty stunted children I placed them in a flat, artificial ant colony divided by a partition. One section was covered, to afford the Queen the darkness and privacy she required. In the other section, reached through a single small hole in the partition, there was a layer of earth perhaps an inch deep. In the hope that the Queen would remain in her chamber and that I soon might find eggs and young near her, I put no earth in her compartment

Ants adjust quickly to new surroundings, and three hours after my Queen and her brood were settled in their new home the Queen started to lay. It was a rare scene to watch. She was surrounded by her workers and as the tiny and infinitely fragile eggs emerged from her body the workers gently seized them in their mandibles and scurried away. I worked late that night readying camera and lights so I could capture this rare scene first thing the next morning. But while I slept the ants tricked me. They had led their Queen from her chamber and concealed her in the soil.

I carefully excavated and captured the runaway. Then I left only a sprinkling of sand in the colony. "They won't hide

(Continued on Page 418)

Kodak



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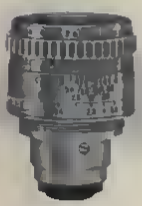
Cine-Kodak Special II Camera



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Cine Kodak Special II Camera is supplied with either of two Kodak Cine *Ektar* 25mm. Lenses—*f*/1.9 or *f*/1.4—both members of the comprehensive series of Kodak-made lenses that are the finest made for 16mm. motion-picture cameras.

In every way, these superb lenses merit the distinction, *Ektar*—Kodak's highest quality designation. At every aperture, they meet the most exacting standards of definition and edge to edge sharpness; provide unmatched flatness of field.

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Skillfully designed and constructed—optically and mechanically precise—the lenses are a match for the truly fine camera they serve.

One of a series of pages which help to explain why Cine-Kodak Special II Camera is properly known as the world's most versatile 16mm. motion-picture camera.

Superb 16mm. motion-picture camera with the controls for special effects integral with the basic model. Fully capable for precision movie making just as it's supplied . . . and further adaptable through accessories to meet the specialized requirements of every field served by 16mm. motion pictures.

One of Cine-Kodak Special II Camera's standard features is described at the left. For further details about this outstanding 16mm. camera, see your Kodak dealer . . . *or write Rochester for the free booklet, "Motion-Picture Making with the Cine-Kodak Special II Camera."*

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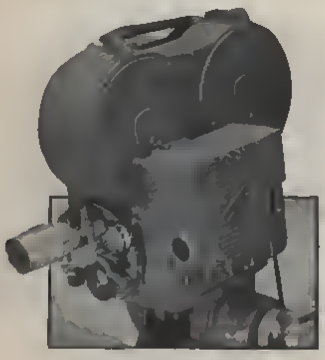
Cine-Kodak Special II Camera is illustrated with 200-foot Film Chamber, standard Kodak Cine Ektar 25mm. f/1.4 Lens, and accessory Kodak Cine Ektar 63mm. f/2.0 Lens.

We have often been asked...



. . .why the Auricon Pro is the only 16 mm sound on film Camera made, regardless of price, which operates so silently it can be used within 10 inches of a microphone

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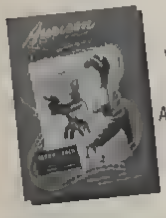

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SUIT THE ANGLE TO THE SCENE

(Continued from Page 405)

then fits each scene into this general pattern, making adjustments for the dramatic requirements of that separate scene.

While this general approach implies a unity of photographic treatment, however, it does not demand that that treatment be monotonous. Variety of camera angle is necessary if audience interest is to be sustained. The best way to insure such variety as well as the appropriate angle for each scene is to make a sketch for each separate setup indicated in the script. The sketches need not be artistic masterpieces, but they should suggest the basic composition of the scene and the vantage point of the camera in relation to the scenic elements.

In a realistic situation, we usually view a scene from that vantage point which we call the "eye level." This vantage point, ranging anywhere from four to six feet above the ground, gives us a normal if sometimes undramatic perspective. Therefore, in the more conventional sequences of a motion picture, we may logically place our camera at eye level and know that the resultant footage will present a natural appraisal of the situation. However, certain scenes demand that the camera be raised or lowered in order to present more forcefully the idea which is to be conveyed.

The low angle is considered an especially dramatic approach; its psychological effect on the audience is quite definite, in that it exaggerates the height of people or set elements in the scene. The elements are made to loom importantly into the composition, thus becoming visually dominant. The low angle is especially effective in scripts based on mystery or violence, since it naturally creates a certain force and suspense. Many cinematographers place their camera either on the ground or actually below ground level, in order to build up this feeling of power. The audience is dominated psychologically by what it is made to view from the low camera angle.

By way of contrast, the high angle places the spectator in a position from which he can look down upon the action of the players and the locale in which they move. The audience thereby is enabled to enjoy a vicarious sense of superiority, an almost godlike omniscience. Aside from its obvious variety value, then, the high angle can be said to be most effective in sequences where, for dramatic effect, it is necessary to subordinate the characters involved in the action.

Camera angle becomes especially tricky but effective when combined with camera movement. The added element of fluidity gives the cameraman greater scope but at the same time it requires more careful pre-planning. For example, the camera angle may seem exactly right for the action occurring at the beginning of a scene, but when the camera has panned or tilted to follow the progressive sweep of the action, the final composition may be totally unsatisfactory. The compromise is reached by planning the beginning and final compositions desired, and by plotting the course which the moving camera must follow to progress from the one to the other while still following the action that occurs in between. The fluid camera demands not merely one camera angle for each scene, but several, laced together by smooth camera movement.

The subjective approach to filming is a special technique which can be very effective when used to put across certain specialized impressions on the screen. The subjective camera assumes the point of view of one of the characters within the scene, so that the audience is allowed to see the action as it would appear through the eyes of that character. At least one Hollywood photoplay, Robert Montgomery's "Lady In The Lake," utilized this technique exclusively to tell its story. Many other films have relied upon subjective camera treatment in specific sequences or scenes, to put the audience in the place of one of the characters. The problem is not merely one of placing the camera where the eyes of the character would be; it involves also the responsibility of tying this scene or sequence neatly into the context of conventionally photographed scenes which precede and follow it. As is the case with most unusual techniques, the subjective approach loses its force when used indiscriminately or too frequently. It should be reserved for situations which definitely demand a special effect.

The wide angle lens, because of its peculiar characteristic of foreshortening, provides the cameraman with a special tool for achieving unusual and dramatic camera angles. Exaggerated perspective is an innate characteristic of the wide angle lens. That which appears in the foreground of a scene filmed with the wide angle lens seems much larger in proportion to the more distant elements than it would be if viewed normally. In this way, the cameraman can emphasize a particular scenic element for maximum dramatic effect. Thus, audience attention is focused sharply on a specific object or player. From the purely compositional standpoint, the wide angle lens is effective in that it emphasizes the converg-

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CLOSING DATE FOR ENTRIES . . . MARCH 1, 1950
ANNOUNCEMENT OF WINNERS . . . MARCH 15, 1950

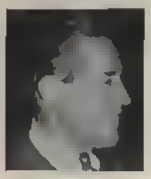
Competition open to members of amateur movie clubs within the United States. Non-movie-club-members may also compete by submitting films through their local amateur movie club. (See rules below.)

ARTHUR MILLER, A.S.C.—Three-time Academy Award winner. "How Green Was My Valley" ('41), "Song of Bernadette" ('43), "Anna And King Of Siam" ('46). Currently shooting "The Gun Fighter" at 20th Century-Fox, starring Gregory Peck, Helen Westcott, Jean Parker and Skip Homeier.

CHARLES G. CLARKE, A.S.C.—President of A.S.C. Author of numerous articles on amateur movie making. Photographed "Captain From Castile," nominated for Academy Award in 1938. Just finished shooting "Two Corridors East," story of Berlin air lift, in Germany for Twentieth Century-Fox.

HAL MOHR, A.S.C.—Photographed many of Universal-International's hit pictures. Has twice won Academy Awards for cinematographic achievement: "A Midsummer Night's Dream" ('35) and "The Phantom Of The Opera ('43).

CHARLES ROSHER, A.S.C.—Winner of two "Oscars" for photography of "Sunrise" ('28) and "The Yearling" ('46). One of MGM's ace directors of photography, is also one of founders of the A.S.C. Currently shooting "Annie Get Your Gun" at MGM. Specialty is Technicolor Photography.



ERNEST HALLER, A.S.C.—Won Academy Award in 1939 for joint photography on "Gone With The Wind." One of Warner Brothers' ace cameramen, filmed such outstanding pictures as "A Stolen Life," "Mildred Pierce," "Saratoga Trunk." Currently shooting "The Hawk And The Arrow."

RAY RENNAHAN, A.S.C.—A two-time Academy Award winner for joint photography on "Gone With The Wind" ('39), "Blood And Sand" ('41). One of Technicolor Corporation's ace directors of color photography. Has just completed filming "The White Tower," starring Glenn Ford and Valli.

RULES

- Each entry must be wholly amateur produced, except for any titles and film laboratory work. Any sound accompaniment must be recorded exclusively by the entrant or club submitting the film.
- Competition open to members of amateur movie clubs within the U.S. Clubs will evaluate and enter the best 8mm and best 16mm film completed by a member since January 1, 1948. Individuals (non club-members) may also compete by submitting films to their local amateur movie club for entry at discretion of the club. (Refer to your local camera store for name and address of local club, or write the Editor.)
- Amateur movie clubs may enter films not to exceed 4, as follows:
  - Best 8 mm member-made film
  - Best 16 mm member made film
  - Best 8mm non member film
  - Best 16mm non-member film
- Film length limits: 16mm—800 feet. 8mm—400 feet.
- Entry Fee: $1.00 for each subject submitted.
- Each film reel as well as its container must be plainly and securely labeled with owner's name and address **plus** name and address of club entering the film.
- All films must be shipped on reels and in cans to contest headquarters fully prepaid. Entry blank and fee should be mailed in advance of film. Films will be returned directly to owner via Express collect, fully insured. **Be sure** to indicate value on your entry blank for which films are to be insured.
- Please indicate make and model of camera and the lenses used in making your picture, also brand of film used. This information will have no bearing on evaluation of films, but is desired by judges for reference.
- Do not submit any films before **January 1, 1950.** Send only your entry blank which may be obtained by writing The Editor, American Cinematographer, 1782 No. Orange Drive, Hollywood, Calif.

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ing lines of a setting and also permits artistic framing of the scene with foreground objects. The wide angle lens can do much to lend force to otherwise ordinary setups. But here again a word of caution is in order: if the wide angle lens is used too frequently, its exaggerated punch becomes commonplace and the force of the technique is dissipated.

The selection of the proper camera angle for a scene amounts to more than just setting the tripod down in a likely spot. It should begin with the script and follow through to the careful framing of action and setting in the locale itself. The intelligent cameraman, be he novice or professional, can scarcely go far wrong if he will remember to "Suit the angle to the scene."

MOVIE CLUB FILMING PROJECT

(Continued from Page 407)

four inch telephoto. Our lighting equipment consisted of a 750 watt Keg-lite, two Mogul photofloods in 24" Morse reflectors, two 1000-watt movie floods, a 2000-watt BM fresnel spot and numerous number two photofloods with clamps and stands. Editing equipment was supplied by one of the members who also offered his services to cut and edit the picture and match the accepted "takes" to the sound track.

Two of our members had extensive experience in photographing Kodachrome interiors. Another member had similar experience with shooting Kodachrome exteriors. These three men shot a total of 2500 feet of Kodachrome stock in 25 picture taking sessions. The total number of 93 scenes evolved into a picture running 15 minutes and thirty seconds. We had 49 get-togethers including planning and shooting sessions. Production stills were made during these sessions by still another member of the club; 73% of the scenes were interiors. One member of the club is a commercial artist in an advertising department of a local company and he was assigned all art and title work. Our club has one member who has worked as an electrician on several industrial motion pictures. Needless to say, he was an important member of the photo unit. Still another member is a studio engineer in WLW, the large local radio station. He arranged for the free use of the recording studio, and handled and directed the voice and music recording for the sound track. A local radio announcer graciously offered his services gratis as narrator and a local actress also supplied her talents for a voice montage and again at the end of the picture for a lip synch part.

The voice track was first recorded on tape, then played back through the system while music was added via disc recordings reproduced through dual turntable equipment. The whole was rerecorded magnetically on tape with a Magnecorder. Two turntables and two Magnecorders were necessary to achieve the desired results. The finished sound track on tape was then sent to a laboratory for dubbing onto film, which was then returned to us and the picture matched to the sound track. The picture was made up for the laboratory in A and B rolls with a cue sheet supplied to the laboratory for printing instructions. The sound track needed no alterations as it was perfectly executed and was complete in itself.

The first scenes of our production were taken April 12th, 1949 and final scenes shot July 30th, 1949. The hospital association supplied $365.00 which was the amount expended for necessities and we have estimated the commercial production value to be approximately $12,000.00.

CASE HISTORIES

(Continued from Page 400)

he acquired a substantial western background and a natural love for wild, western scenery which he so aptly translates to his cinematic compositions.

And while we're citing the younger generation of cinematographers, let's take a look at the history of Joseph LaShelle, A.S.C., who won an Academy Award in 1944 for his photography of "Laura." LaShelle was preparing to enter Stanford University to study electrical engineering in 1921 when he secured a summer vacation job at the old Lasky Laboratory in Hollywood. That ended his electrical engineering desires. Eventually he became superintendent of the printing room at the new Paramount laboratory.

"It was in 1925," he relates, "that Charles Clarke, A.S.C., decided that I ought to become a cameraman. He sold me completely on the idea and I quit my seventy-five dollar a week job and became Clarke's assistant." That was the beginning, for LaShelle, of a twenty year grind to reach the top. After three months as an assistant cameraman, he was advanced to second cameraman and left Paramount for the Metropolitan Studio.

"I was transferred from Metropolitan to Pathe shortly after that," says La-

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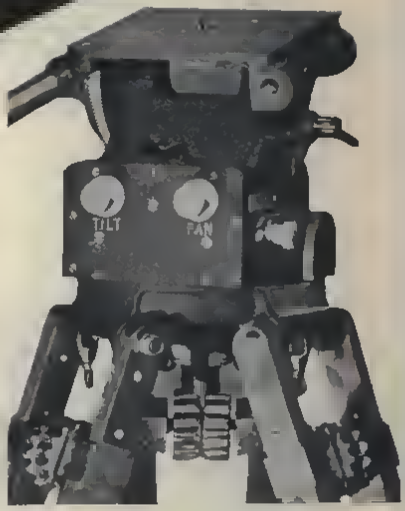

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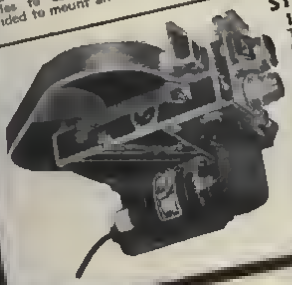

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Shelle, "and while at Pathe I began my long and happy association with Arthur Miller, A.S.C., now one of Fox's top directors of photography."

Soon afterward, both Miller and La Shelle moved to Twentieth Century-Fox studios. There LaShelle was operative cameraman for Miller on a long and noteworthy list of films. In due time, LaShelle was made a full-fledged director of photography. His first assignment was Fox's "Happy Land."

Working as assistant to a cinematographer has, in most cases, constituted the major step toward becoming a cinematographer—or director of photography, as first cameramen are termed today. William Mellor, A. S. C., probably the youngest of the industry's directors of photography, achieved his goal that way. Virtually the whole of his cinematic career has been spanned in the relatively few years since the advent of sound.

"I received about the best cinematographic schooling anyone could ever want," he says. "For six years I worked as operative cameraman with Victor Milner, A.S.C. and with Charles Lang, A.S.C., both top flight cinematographers at Paramount. Those fellows taught me things I could never have learned in any 'school' of photography."

Since Mellor was made a full fledged director of photography at Paramount, he has climbed steadily to the forefront, shooting everything from westerns and comedies, to Bing Crosby and Bob Hope musicals. Later he became Dorothy Lamour's favorite cameraman and has probably photographed more of her pictures than any other cinematographer.

We have to go back farther than William Mellor's time, however, to find some of the more exciting careers in cinematography—those of Edeson, Jackman, Clyde DeVinna, and others. Originally photography was only a hobby with DeVinna. When he started a four-year stretch in the Navy in 1909 as a radio man, DeVinna carried along his still camera to snap pictures. One day his ship received one of the old box-type motion picture cameras and because of his experience in photography, DeVinna was drafted to hand crank this new movie camera to record Navy maneuvers.

Following his discharge from the Navy, DeVinna had a brief interlude as a press photographer, both in San Francisco and Los Angeles. Later he went to the Ince studios where he planned and executed some of the first motion picture publicity ever attempted in the business. One day Ince's head motion picture cameraman was taken ill and DeVinna was sent out to take his place. Back at cinematography again, DeVinna remained at Inceville for several years. Sometime later Metro-Goldwyn-Mayer engaged De-

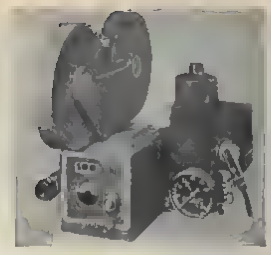
Vinna to handle a special photographic expedition to the Grand Canyon, and this resulted in a permanent connection with MGM that lasted 18 years.

Victor Milner, A.S.C., is one of the very few directors of photography who early set out to be a motion picture cameraman. As a gangly, red-headed operator in a New York "nickelodeon," he was soon captivated by the kind of photography thrown on motion picture screens. But it was a particularly well-photographed travelogue of the ice-packs of Spitzbergen that crystalized his ambition to become a cameraman. The chance came when he got himself a job as an apprentice in the combined camera factory, laboratory and studio of the pioneer cine-engineer, Eberhard Schneider. Here Milner developed film, toned, tinted, edited and spliced it. Finally he mastered the art of operating a camera so thoroughly that his employer sent him out with a customer to photograph what was one of the first feature-length productions made in America—an independently produced version of "Hiawatha."

Milner next spent several years with another customer, circling the globe and making a series of travel films. Then followed a long and exciting engagement with Pathe News. Milner switched to theatrical movie making when his honeymoon in 1918 brought him to Hollywood. Here began the hard climb from assistant to the post of first cinematographer. It was during this climb upward that Milner had the good fortune to work with John Seitz, A.S.C., whom he credits to be the industry's greatest master of lighting. It was through Seitz that Milner acquired his vast knowledge of set lighting, knowledge that subsequently made him one of the most sought after cinematographers in Hollywood. While at Paramount, Milner was invariably Cecil B. DeMille's choice for cinematographer on every DeMille picture; and it was this happy combination of De Mille and Milner that won for Milner the coveted Academy Award for the photography of "Cleopatra" in 1933.

No chronicling of case histories would be complete without including that of Arthur Edeson, A.S.C., one of the real "young-old-timers" in the business. Edeson was a struggling portrait photographer in 1910 when he decided to apply for a job as studio portraitist and still cameraman at the old Eclair Studios in Fort Lee, New Jersey. While waiting in the studio's outer office to be interviewed, an assistant director came in, looked rapidly over the group of people waiting there and said, "I'll take you, and you, and you and you!" One of the chosen was Edeson and the next thing he knew he had been hired—as an *actor!*

This appealed to him, too, because he



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had had some experienced as an actor on the stage, but had never considered going into the movies. So he remained an actor and made pictures on the side. One day his photos caught the eye of the studio's ace cameraman. "You're wasting your time," he told Edeson. "Switch over to the other side of the camera where your ability will mean more and you can be sure of a steadier and longer career." Edeson took his advice and when later one of the cameramen fell sick during a picture, Edeson was given the chance to complete it. He went on to become one of the industry's ace cinematographers, shooting most of Douglas Fairbanks, Sr's., silent films and later such well-remembered sound productions as "In Old Arizona," "All Quiet On The Western Front," and "Mutiny On The Bounty."

Some of Hollywood's best cinematographers got their start in the comedy field, with Mack Sennett and Hal Roach. Of these, probably Fred Jackman is best remembered and the most illustrious. Fred, too, *wanted* to be a motion picture cameraman, so he bought his own camera and set out to make pictures on his own. His "business headquarters" was a rickety film laboratory which occupied an old pioneer home atop Bunker Hill in downtown Los Angeles. One day a studio asked the lab to send them a cameraman, one who owned his own camera. Fred was sent out on the job. The director was Hal Roach.

The first day on the job, Roach approached Fred and said, confidentially, "This is the first picture I ever directed. So if you see me do anything wrong, its O.K. to tell me."

"Don't worry," Fred told him, "It's the first picture I ever photographed, too!"

What happened after that is movie history. Roach went on to become one of Hollywood's leading film producers while Jackman became Mack Sennett's chief cameraman. He is credited with creating more trick cinematic effects than any other early-day cameraman. Later he specialized in this field, ultimately setting up Warner Brothers' special effects department. Now retired, he manages the American Society of Cinematographers as the Society's Executive Vice-President.

The story of the beginning of cinematographic careers for many another A.S.C. member makes interesting reading, too, but limited space prevents our relating them all here. In a subsequent issue we shall tell you how such top cinematograpers as Charles Rosher, Arthur Miller, George Folsey and others got their start.

SIGNAL SYSTEM

(Continued from Page 402)

signal No. 8, that the camera recorded the action okay.

The system is a boon to crews shooting westerns out in the wide open spaces where winds drown out the voice, or echoes make verbal instructions unintelligible. Action at sea can be speeded up and made easier for all concerned by this visual method of relaying instructions between camera crew and the director and cast.

There'll be more orderly procedure, too, in shooting long shots inside sound stages of scenes of epic proportions.

The system can ease the strain for players, too, if they are conversant with all twelve signals and thus can take a cue in a long shot from the director standing near the camera some distance away.

Some may think that using a P.A. system or a walkie-talkie would prove more satisfactory. But there is always the problem when equipment is not immediately at hand the moment it's needed. You always have your arms.

Webb and McGarry are submitting the plan and code of signals to the Academy of Motion Picture Arts and Sciences for approval, with the ultimate goal of having the signals printed on small cards and distributed to all technical workers employed on motion picture sets, and to directors, their assistants and possibly to players, too. (Signals copyright 1949 McGarry-Webb.)

LIGHTING BACKINGS

(Continued from Page 399)

were noted on the chart, which was filed away with the script. Such charts also provided a guide to lighting the backings when they were used in subsequent camera setups on the same set.

The light source frame mounts on standard wall jacks and is easily wheeled into place on the set or removed after use. The backings, of course, are also mounted on vertical frames, and after use are rolled up and stored in the scene docks.

Two factors make these backings important in the production of motion pictures today, at least on the Goldwyn lot. First, this studio, which continues to follow the formula of "small aperture" photography introduced by the late Gregg Toland, demands flawless detail in all backings in order that the purpose of critical focus shall not be defeated. The other factor is the great economy in the lighting costs for illuminating backings by this method. Photoflood lamps,

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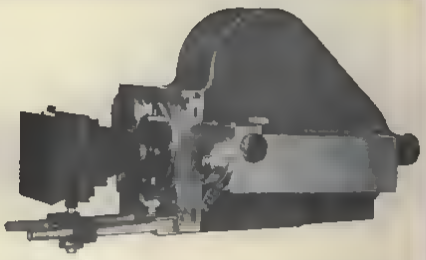

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which make up the source's seventy variable illuminating units, are relatively inexpensive and current consumption is considerably less than that of any other illuminating source which has been used to date with the backings

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During production of "With All My Love," technical heads of other studios visited our sets for first hand observation of the backings and to study the new light source Jones devised for them It is reported that the M B Paul backings shortly will be considered by the Research Council for general industry approval and it is likely this new lighting method will be made a part of the proposal. The development marks another important technical contribution to the industry by the men of Samuel Goldwyn studios, who have a long list of such contributions to their credit.

FIFTEEN DOLLAR MOVIE STAR

(Continued from Page 408)

you again, my lady!" I thought, and about that I was right. But the ants still bested me because the Queen abruptly ceased laying. I kept a close vigil for almost a week, convinced that time and her pregnancy would eventually force her to resume her function. Nothing happened. Perhaps, I thought, she would lay if there were a sanctuary for the eggs.

In the open section of the colony I arranged a little hill surrounding it with a glass fence made of microscopic slides At one corner there was left a very small crack which would admit the dwarfed workers but bar the Queen. The workers quickly found the crack, entered the stockade and went to work digging tunnels and shaping galleries. All of this time the Queen was in her chamber, possibly 15 inches away I stood by, impatiently of course, with camera and lights ready to shoot at the first sign of action from the Queen.

Soon a delegation of five workers raced out of the stockade and surrounded the Queen. There was a second of turmoil too fast for me to follow and the Queen rolled over on her side, apparently dead. I'd like to know whether she was indeed unconscious or merely completely passive. The workers now picked her up, literally flung her across their backs and carried her back to the gap in the glass fence. Arriving there they undertook to get the motionless Queen through the slit. There was nothing gentle about their behavior, either. Willy-nilly, it was plain, the Queen was going through that crack and into the gallery prepared for her

She might go through in small and distinctly separate pieces—but it was evident the pushers, pullers, haulers and jerkers who were ant-handling Her Majesty would get her though! Well, calculating what that Queen had cost me, and the improbability of getting a replacement for her essential role in my production, I finally stiffled my curiosity and opened the gate myself, watching with mingled relief and regret as the triumphant workers rushed their mother into the little hillock. There, as events proved, she again began to lay, living to play the lead in *Life-Cycle* and present me with the exquisite grouping of eggs seen in the film

So, like other producer-directors before me, I was reduced to nature-faking, seeking artificially to reconstruct what I had seen that first evening I isolated the Queen in a clean can with two workers who would feed her and care for her needs. In a few days close inspection revealed a cluster of eggs of pearl-like beauty.

For the next week I was busy at a task of the utmost improbability I was seeking to learn how to up end this indignant Queen with one hand, pick up a single egg with the other, stick the egg onto the minute tip of her wildly-wriggling royal abdomen and then get ant and egg into the pin-head field of view in front of my lens, while somehow I pushed the motor button and switched on my lights.

I didn't get *that* picture, either. But I learned to pick up the Queen in tweezers with the tongs wrapped in absorbent cotton. And I learned that neither Du Pont cement nor saturated sugar water nor any other adhesive would long hold an egg in place on a Queen ant's tail. Oh, I got the egg stuck on several times, yes, but before the camera could be started it was knocked loose. The nearest I came to my ideal was a scene in which the Queen stands, head bowed in shame, with an egg directly under her

In micro-photography with quick, lively insects like ants, the problem of controlling their field of activity is acute. My Harvesters seemed possessed of a will to expand, expand. They would rush to the right or left limits of any field containing them, leaving center screen blank. After much experimenting I devised a handy device possibly worth describing. It consisted merely of a block of good, carefully scored with parallel lines, capable of receiving and holding firmly sheets of

microscope glass through which one can photograph with a minimum of distortion and light loss. Right and left limits of the field were provided by strips of ordinary plate glass which could be slid back and forth at will and secured in place by rubber bands. It was simple to graduate the wooden base with the field sizes corresponding to various extension tubes.

For illumination I used three Color-Tran spots. Their intense heat was filtered off by passing the light through an ice-water filter. Also, since almost all scenes were made at 64 frames per second, I turned the lights on at shooting intensity only when the camera was rolling and got my footage before the swiftly mounting heat could harm my little actors.

In this film I used almost entirely a Zeiss f/1.4 coated Biotar although for a few scenes a 2" coated f/1.6 Eastman Anastigmat did noble service.

Scenes possibly worth noting in the film are those revealing life and movement in the seemingly inert larvae; a 360-frame three-hour stop-action sequence showing the coming to life of a pupa and a 35-foot recapitulation panning shot at the end of the film. With a Stevens motor driving my Bolex, I shifted my stage across the lens, stopping six times to show in review an egg and its development through the full cycle.

New Densitometer

Photo Research Corp., 127 W. Alameda, Burbank, headed by Karl Freund, A.S.C., announces its new Spectra Color Densitometer is now in production. It is entirely photo-electric in operation, which makes possible a greater range of density readings. Readings may be taken from 0.0 to 4.0 density, on either B&W or color films.

Outstanding application of instrument is said to be for measuring monopack and integral tripack color films.

* * *

Trifilm Splicer

Adding to their famed line of cine equipment which includes the popular Bolex cameras, Paillard Products, Inc., 265 Madison Ave., New York, announce the Trifilm Splicer, engineered by the same Swiss craftsmen who produce the cameras. Splicer will handle 8mm, 9½ mm. or 16mm. films. A feature is the self-adjusting cutting blade, assuring accurate splices. Finish is in satin chrome and an extra emulsion scraping knife is included. Price is $19.95.

* * *

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Current Assignments of A.S.C. Members

Major film productions on which members of the American Society of Cinematographers were engaged as directors of photography during the past month

Columbia

• BURNETT GUFFEY, "A Mother For May," with William Holden, Coleen Gray and Charles Winninger Norman Foster, director

• WILLIAM SNYDER, "The Petty Girl," with Robert Cummings, Joan Caulfield, and Elsa Lanchester Henry Levin, director

• IRA MORGAN, "Captive Girl," with Johnny Weismuller, Buster Crabbe, and Anita Lhoest William Berke, director

• JOSEPH WALKER, "No Sad Songs," (Robert Rossen Prod) with Margaret Sullavan, Wendell Cory, Viveca Lindfors and Natalie Wood Rudy Mate, director

• CHARLES LAWTON, "Kill The Umpire," with William Bendix and Gloria Heory. Lloyd Bacon, director

• VINCENT FARRAR, "Beauty On Parade," with Robert Hutton, Ruth Warrick and Lola Albright Lew Landers, director

Independant

• ARCHIE STOUT, "Never Fear" (Filmakers, Inc.) with Sally Forest, Keefe Brasselle and Rita Lupioo Ida Lupino, director

• PHILIP TANNURA, "The Flying Saucer," with Mikel Conrad, Virginia Hewitt, Russell Hicks Mikel Conrad, director

• HAL MOHR, "Here Lies Love," (Briskin-Smith Prod) with Robert Young, Betsy Drake, John Sutton and Jean Rogers James V Kern, director

M-G-M

• JOHN ALTON, "Devil's Doorway," with Robert Taylor, Paula Raymond, Marshall Thompson and Louis Calhern Anthony Mann, director

• HARRY STRADLING, "The Yellow Cab Man," with Red Skelton, Gloria DeHaven, Walter Slezak James Gleason and Edward Arnold Jack Donohue, director

• CHARLES SCHOENBAUM "Outriders," (In Color) with Joel McCrea, Arlene Dahl and Barry Sullivan Roy Rowland, director

• PAUL C VOGEL, "You're Only Young Twice" (In Color), with Dean Stockwell, Scotty Beckett, Darryl Hickman and Leon Ames William A Wellman, director

• JOSEPH RUTTENBERG, "The Miniver Sequel (In Color—shooting in England), with Greer Garson, Walter Pidgeon John Hodiak and Cathy O'Donnell Henry Potter, director

• RAY JUNE, "The Reformer And The Redhead," with June Allyson, Dick Powell, David Wayne and Cecil Kellaway Norman Panama and Melvin Frank, directors

• ROBERT SURTEES, "King Solomon's Mines," (Technicolor) (Shooting in Belgian Congo) with Deborah Kerr, Stuart Granger and Richard Carlson Compton Bennet, director

• CHARLES SCHOENBAUM, "Duchess Of Idaho," (Technicolor) with Esther Williams, Van Johnson, John Lund and Paula Raymond Robert Leonard director

• CHARLES ROSHER, "Annie Get Your Gun," (Technicolor) with Betty Hutton, Howard Keel, Louis Calhern, J Carrol Naish, Edward Arnold Keenan Wynn and Benay Venuta George Sidney, director.

• HAROLD ROSSEN, "Asphalt Jungle," with Sterling Hayden, Jean Hagen and James Mitchell. John Huston, director

Monogram

• WILLIAM SICKNER, "Bomba On Panther Island," with Allene Roberts, Johnny Sheffield and Alita Baron Ford Beebe, director

• HARRY NEUMANN, "Borrowed Guns," with Whip Wilson, Reno Browne Lambert Hillyer, director

• GILBERT WARRENTON, "Blue Grass Of Kentucky," (In color) with Bill Williams, Jane Nigh, and Ralph Morgan Wilham Beaudine, director

• GILBERT WARRENTON, "Young Daniel Boone," (In color) with David Bruce and Kristine Miller Reginald LeBorg, director

Paramount

• WILLIAM MELLOR, "A Place In The Sun," with Elizabeth Taylor, Montgomery Clift and Shelly Winters George Stevens director

• GEORGE BARNES, "Mr Music," with Bing Crosby, Charles Coburn, Ruth Hussey and Nancy Olson Richard Hadyn, director

• ROY HUNT, "Outrage," (Pine-Thomas) with Macdonald Carey, Gail Russell, Ed Rios Joseph Losey, director

R-K-O

• RAY RENNAHAN, "The White Tower" (Shooting in Europe) with Glenn Ford, Valli, Claude Rains, Sir Cedric Hardwicke Oscar Homolka, Lloyd Bridges, Ted Tetzlaff, director

• LEE GARMES, "With All My Love" (Samuel Goldwyn Prodn) with Ann Blyth, Joan Evans, Farley Granger, Donald Cook Jane Wyatt, Ann Dvorak and Phyllis Kirk David Miller, director

• FREDDIE YOUNG, "Treasure Island" (Walt Disney Prodn —Shooting in England) with Bobby Driscoll, Robert Newton Basil Sidney and Denis O'Dea Byron Haskin, director

• HARRY WILD, "Carriage Entrance," with Robert Mitchum, Ava Gardner and Melvyn Douglas Robert Stevenson, director

• NICHOLAS MUSURACA, "Gun Thunder," with Tim Holt, Richard Martin, Elaine Riley Lesley Selander, director

• LEO TOVER, "Blind Spot," (Skirball-Manning Prod.) with Claudette Colbert, Robert Ryan and Jane Cowl, Mel Ferrer, director.

20th Century-Fox

• CHARLES G CLARKE, "Two Corridors East" (Shooting in Berlin, Germany) with Montgomery Clift, Paul Douglas, Cornella Burch and Burni Loebel George Seaton, director.

• HARRY JACKSON, "A Ticket To Tomahawk (In Color) with Dan Dailey, Ann Baxter, Rory Calhoun and Walter Brennan Richard Sale, director.

• FRED JACKMAN, JR., "The Cariboo Trail" (Nat Holt Prodn —In Color) with Randolph Scott, Bill Williams, Victor Jory and Karin Booth Edwin L Marin, director.

• ARTHUR MILLER, "The Gun Fighter," with Gregory Peck, Helen Wescott, Jean Parker and Ship Hometer Henry King, director

• JOSEPH LASHELLE, "The Big Fall," with John Garfield, Micheline Prelle, Luther Adler and Orley Lindgren Jean Negulesco, director

• LEON SHAMROY, "Cheaper By The Dozen," (Technicolor) with Jeanne Crain, Clifton Webb, Myrna Loy Betty Lynn Sara Allgood Walter Lang, director

United Artists

• HENRY FREULICH, "The Iroquois Trail," (Bernard Small Prod) with George Montgomery, Brenda Marshall, Glen Langan, Sheldon Leonard and Paul Cavanaugh Phil Karlson, director.

Universal-International

• RUSSELL METTY, "Sierra" (In Color) with Audie Murphy, Wanda Hendrix, Anthony Curtis, Burl Ives Alfred E Green, director.

• CLIFFORD STINE, "Outside The Wall," with Richard Basehart, Marilyn Maxwell, Dorothy Hart Crane Wilbur, director.

• WILLIAM DANIELS, "Deported" (Shooting in Italy) with Marta Toren, Jeff Chandler Robert Siodmak, director.

• MAURY GERTZMAN, "Double Crossbones," (In Color) with Helena Carter, Donald O'Connor, John Emery Charles Barton, director.

Warner Brothers

• WILFRID CLINE, "The Daughter Of Rosie O'Grady, (Technicolor) with June Haver, Gordon MacRae, Geoe Nelson and James Barton David Butler, director

• TED MCCORD, "The Victim" with Joan Crawford, David Brian and Steve Cochrane Vincent Sherman, director

• ERNEST HALLER, "The Hawk And The Arrow," with Burt Lancaster, Virginia Mayo and Frank Allenby Jacques Tourneur, director

• SIDNEY HICKOX, "The Rock Bottom," with Eleanor Parker, Patricia Neal, Ruth Roman, and Lief Ericson Robert Wise, director

---

Prices Reduced

Price reductions affecting 8mm home movie film and certain cameras were announced by Eastman Kodak Company last month. Both black and white and Kodachrome 8mm. in 25-foot rolls and magazines were included in the reductions. Company's new Reliant 8mm camera with f/2.7 lens was reduced from $89.00 to $79.00.

* * *

Brockway Heads Pathe Cine

Robert E Brockway, head of Director Products Corp., makers of the Norwood exposure meter, was recently elected president of Pathé Ciné, sole American distributors of the well known French line of cameras and projectors.

* * *

Camera Demonstration

S O.S. Cinema Supply Corp., 602 W. 52nd St., N. Y., held open house Friday, October 21st, at which time Bud Furer, head of Producers Service Co., Burbank, Calif., demonstrated the Acme Process Camera and stop motion and variable speed synchronous motors which they manufacture and which are distributed by S.O.S.

THIS IS THE DIRECTOR OF PHOTOGRAPHY

(Continued from Page 401)

to millions of people the important function of the motion picture cameraman.

Mr. Struss is shown in pre-production consultations with the art director, the wardrobe department and head of the makeup department. "It is with an eye to what is expensive to photograph and what is not that budgets and breakdowns are prepared," the narrator explains. "It is with a sound conception of how they will look before the critical eye of his camera that costumes are designed and makeup is applied."

The usual procedure of the cinematographer in checking the dressing of sets, and on through a long list of other production operations is shown. "On the cinematographer, then, rests the crucial responsibility of integrating and translating to film all the many and varied tangibles and intangibles which go into making every motion picture," the narrator explains.

"It is a responsibility for which he is well qualified. His background is one of much study, training and experience. He has served a long and thorough apprenticeship in all phases of cinematography — a progressive apprenticeship which took him through stages of experience as an assistant cameraman, and later as an operating cameraman All this long before he reached his present status as a director of photography, A.S.C."

"The letters A.S.C identify him as a member of the American Society of Cinematographers, just as, in Britain, 'B.S.C.' designates a member of the British Society of Cinematographers."

The picture proceeds to show the preparation of sets for actually shooting the picture, the placement of lights and then the addition of certain gadgets whose function are to tone down a light here or add a shadow there, all according to the individual flair of the cinematographer For light you see, is his medium — the only one in which he works, and he orders it to his liking.

"By changing his lighting," the narrator tells us, "the cinematographer creates almost unlimited variations in mood and character on the screen, as a few samples of his artistry will illustrate." And a series of inserts illustrate lighting for romance, for comedy, and for drama. Some of the most notable scenes from recent outstanding films, some of them Academy Award winners, are shown as the narrator explains that here is the tangible result of the cinematographer's work: "Images on film — a hundred and fifty thousand of them in the average feature-length picture! A celluloid ribbon a mile and a half long."

The picture closes with the thought that wherever the cinematographer works, whatever his assignment, he has but one purpose: to add to your movie-going pleasure by giving you top entertainment *in pictures.*

Script for the picture followed long consultations with leaders in the profession and officers of the A.S.C. Grant Leenhouts, of the Academy of Motion Picture Arts and Sciences, which sponsored production of this and other films in the series, acted as coordinator for the writers gathering data that went into the final script by screen writer Lyle Robertson. The picture was produced at Paramount Studios by Jerry Hopper and photographed by Lionel Lindon, A.S.C.

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Of AMERICAN CINEMATOGRAPHER, published Monthly at Los Angeles, California, for October 1, 1949

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ARTHUR E. GAVIN
Editor

Sworn to and subscribed before me this 6th day of October, 1949

(Seal) C. K. Buchanan

(My commission expires Oct. 10, 1952.)

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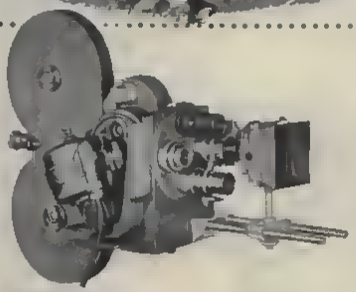

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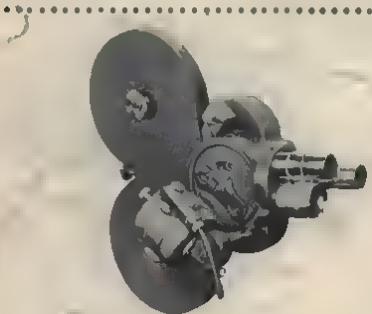

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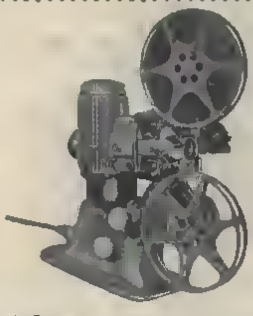

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